

Certificate No: **TAMO000132**

TYPE APPROVAL CERTIFICATE

This is to certify:	
That the Stern Tube Seal	
with type designation(s) Stern tube seal (Water and Oil lubricated)	
Issued to	
ProfiSeal GmbH	
Schornsheim, Rheinland-Pfalz, Germany	
is found to comply with DNV GL rules for classification – Ships DNV GL rules for classification – High speed and light c	raft
Application :	
Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.	
Issued at Hamburg on 2019-06-27	for DAW CI
This Certificate is valid until 2024-06-26.	for DNV GL
DNV GL local station: Augsburg	
Approval Engineer: Stanislav Avanesov	Burkhard Lilienthal Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



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Job Id: **262.1-030799-1** Certificate No: **TAM0000132**

Product description

Stern tube seals for closed systems with oil lubrication and for open systems with water lubrication.

Application/Limitation

For shaft diameters 20-280mm

Type Approval documentation

Our approval Ref.-No. 117135/02/CKB

Marking of product

The product shall be marked with the manufacturer's name or trademarks and type number identification.

Periodical assessment

For retention of the Type Approval, a DNV surveyor shall perform a survey after 2 and 3,5 years after issue of certificate to verify that the conditions of the Type Approval are complied with.

The objective of the Periodical Assessment is to verify that the conditions for the Type Approval are not altered since the Type Approval Certificate was issued. The main scope of the Periodical Assessment will normally include:

- Verification of the Type Approval applicant's production and quality system w.r.t. ensuring continued consistent production of the Type Approved products at the Type Approval applicant's own premises and at other companies that are given the responsibility for manufacturing of the products.
- Review of the Type Approval documentation and that this is still used as basis for the production
- Review of possible changes to the design, the material and the performance of the product
- Verification of the product marking.

In cases where the Type Approved product is manufactured at other companies, the Periodical Assessment shall verify that the Type Approval applicant has a quality control system for consistent production at their licensees/subcontractors. Furthermore Periodical Assessment shall be carried out randomly at these companies.

When a Type Approved product is manufactured at other companies, the Type Approval applicant takes the sole responsibility for the conformity of the product to the applicable requirements.

END OF CERTIFICATE

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CERTIFICATE NUMBER 18-HG1712303-PDA

EFFECTIVE DATE 09 Feb 2018 EXPIRATION DATE 08 Feb 2023

ABS TECHNICAL OFFICE

Hamburg Engineering Department

CERTIFICATE OF

Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

PROFISEAL GMBH

MUEHLERSTRASSE 13 D-55288 SCHORNSHEIM Germany

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product Stern Tube Seals

Model ProfiSeal

This Product Design Assessment (PDA) Certificate remains valid until expiration date or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau of Shipping

Efstratios Maliatsos Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

Approval Certificate



This is to certify, that the undernoted products have been approved in accordance with the relevant requirements of the GL Approval System.

Certificate No.

43 130 - 02 HH

Company

ProfiSeal GmbH

Mühlerstrasse 13

55288 Schornsheim, GERMANY

Product

Sterntube Seal (Water and Oil lubricated)

Type

ProfiSeal

Technical Data / Application Sterntube seals for closed systems with oil lubrication and for open systems with water lubrication on GL classed ships,

special service crafts and pleasure boats

For shaft diameter 20-90mm and 100-180mm

Approval Standard

GL Rules Part 1, Chapter 2, Section 4, D

Documents

See Ref.-No. 117135/02/CKB

Remarks

Material tests and final testings have to be carried out, so far as required.

Each application has to be notified in written form to the society.

Valid until

2018-01-11

File No.

XI.J.07

Germanischer Lloyd

Hamburg, 2013-01-11

Dr. Dimitrios Sideris

Stanislav Avanesov

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Type Approval Certificate Extension

This is to certify that Certificate No. 99/20055 (E2) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER

ProfiSeal GmbH

Mühlerstraße 13 55288 Schornsheim

Germany

DESCRIPTION

Sterntube seals for water- and oil lubricated propeller shafts with and without

Pneumostop (stand still seal)

TYPE

1) 10.00X.XXX.X0XA - Sterntube seals ProfiSeal for shaft

diameters from 20 mm to 90 mm

2) 10.00X.XXX.X0XA - Sterntube seals ProfiSeal for shaft

diameters from 80 mm to 280 mm

APPLICATION

Sterntube seals for closed systems with oil lubrication and for open systems with water lubrication on Lloyd's Register classed ships as well as for yachts

and special service crafts

STANDARD

Lloyd's Register Rules and Regulations for the Classification of Ships, 2014

RATINGS

Leakage rate: nil

Temperature: oil max. 80° C, water max. 40° C Pressure: 1) 0.05 to 1.5 bar, 2) 0.05 to 7.0 bar

Certificate No.

99/20055 (E3)

Issue Date

30 January 2015

Expiry Date

31 October 2019

Sheet

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Olaf Schmidt Hamburg Technical Support Office Lloyd's Register EMEA

Lloyd's Register EMEA 71 Fenchurch Street, London EC3M 4BS

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